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JOB SATISFACTION AND REHABILITATION COUNSELOR PERFORMANCE.
BY- MUTHARD, JOHN E. MILLER, LEONARD A.
IOWA UNIV., IOWA CITY, COLL. OF EDUCATION

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THIS STUDY EXAMINED THE JOB SATISFACTIONS OF
REHABILITATION COUNSELORS USING A SAMPLE OF 143 COUNSELORS
FROM SIX "DVR" (STATE-FEDERAL GENERAL VOCATIONAL
REHABILITATION PROGRAM) AGENCIES. A REVISED FORM OF THE JOB
SATISFACTION INVENTORY, ORIGINALLY DEVELOPED BY JOHNSON
(1955), ASSESSING SATISFACTIONS WITH EIGHT DIMENSIONS OF THE
JOB (RELATIONS WITH ASSOCIATES, RELATIONS WITH EMPLOYER,
INTEREST IN JOB, JOB INFORMATION, WORK CONDITION, GOALS,
PHYSICAL AND MENTAL EXERTION, AND FINANCES), WAS USED TO
COLLECT INFORMATION ON THE NATURE OF COUNSELOR JOB
SATISFACTION AND TO UNDERSTAND THE RELATIONSHIPS OF SUCH
SATISFACTIONS WITH OTHER CRITERIA OF PERFORMANCE. A CLUSTER
ANALYSIS PERFORMED ON THE CORRELATION MATRICES OF MALE AND
FEMALE COUNSELORS RESPECTIVELY FOUND THE JOB SATISFACTION OF
MALE AND FEMALE COUNSELORS TO BE SIMILAR. HOWEVER, THE
ASSOCIATION OF SATISFACTION WITH OTHER CRITERIA OF
PERFORMANCE WAS DEPENDENT TO SOME EXTENT ON THE SEX OF THE
COUNSELOR. THIS DOCUMENT WAS PUBLISHED IN "THE CRITERIA
PROBLEM IN REHABILITATION COUNSELING" AS CHAPTER VI (PP.
42-47), APPENDIX D (PP. 76-82), AND REFERENCES (PP. 123-129).
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THE CRITERIA PROBLEM IN REHABILITATION COUNSELING

**John E. Muthard
and
Leonard A. Miller**

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION**

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**College of Education
THE UNIVERSITY OF IOWA
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CHAPTER VI

JOB SATISFACTION AND REHABILITATION COUNSELOR PERFORMANCE

Although the main concern of the project was to contribute to greater understanding of the criteria problem in rehabilitation counseling, the job satisfaction of rehabilitation counselors also seemed worthy of attention. In a field which can anticipate a continued short supply of professionally qualified workers, the attractiveness and holding power of the field must be a concern to both vocational rehabilitation administrators and educators. More directly, such a study was considered of interest for two reasons: (1) it would determine the interrelationships between various aspects of job satisfaction and the relationship of these to various job performance measures for rehabilitation counselors; and (2) it would contribute to our understanding of job satisfaction among counselors and be of general interest in that similar studies of professional workers have not been published.

Method

A Job Satisfaction Inventory (JSI) (Appendix D), originally developed by Johnson (1955) for use with teachers, was revised and administered to the sample of DVR counselors described in Chapter IV. After testing the inventory, the number of items was reduced to 70 by eliminating those which were not discriminating among counselors, and the form of item response was changed. Johnson's inventory was selected since it appeared to cover most of the major dimensions of job satisfaction which other research had shown as important (Scott et al, 1958). In addition, his validation studies using self-estimates of satisfaction as well as satisfaction ratings by closely acquainted co-workers as criteria appeared promising. The JSI covered the following areas: (1) physical and mental exertion, (2) relations with associates, (3) relations with employer, (4) security, advancement and finances, (5) interest in, liking for and emotional involvement in the job, (6) job information, training and status, (7) physical surroundings and work conditions, and (8) future, goals and progress.

For this sample of rehabilitation counselors, criteria described in Chapter IV were also available. Briefly, the variables were: (1) co-worker ratings, (2) supervisor ratings, (3) present state ratings, (4) case velocity, (5) average caseload, (6) average 12 closures, (7) average 13 closures, and (8) average 15 closures. The definitions and procedures for collecting the above data have been described in Chapter IV.

Reliability: The reliability of the total score from the JSI, using split-half procedures and the Spearman-Brown correction, was .88. For the various sections within the inventory, corrected split-half reliability coefficients ranged from .47 to .89, with the mean, using the Fisher Z transformation, being .80. The reliability of the criteria measures is also described in Chapter IV.

Results: Job satisfaction studies in many different settings have suggested factors which appear to influence and enter into job satisfaction as a variable of work adjustment (Robinson and Connors, 1962, 1963; and Scott et al, 1960). Among others, whether or not a measure of overall job satisfaction or a measure of satisfaction with specific job-related factors is used appears to make a difference. Job satisfaction also appears to differ depending on the sex of the respondent. Information on the significance of these factors in the job satisfaction of rehabilitation counselors was our first objective.

As a first step, the eight sections or dimensions of the JSI were inter-correlated to assess what independence existed among these rather specific job-related factors. Table 17 shows these intercorrelations. Although many of the correlations were statistically significant, and there was some indication of a general satisfaction variable, as our further analysis shows, satisfactions with different dimensions of the job appear to be relatively independent of each other.

A cluster analysis (Tryon, 1939) was performed on the correlation matrices of male and female counselors respectively to seek some information on how specific dimensions might cluster together by sex. Table 18 provides the results of this procedure.

We found that satisfaction dimensions (5) (interest in, liking for and emotional involvement in the job) and (8) (future, goals and progress) formed one cluster for both men and women counselors. For both groups, the second cluster involved (2) (relations with associates) and (3) (relations with employer). However, it included (7) (physical surroundings and work conditions for men) and (6) (job information, training and status) for women. None of the clusters were pure or relatively isolated from other variables in the matrix. The within-cluster average correlations were only about one and one-half times as great as the average correlations of single cluster dimensions to all other dimensions. Again, the ill-defined clusters reflect relative independence among the eight dimensions. The clusters which did appear were, overall, quite similar for men and women.

The similarity between men and women was also checked by performing a Type I analysis of variance (Lindquist, 1953) on the profiles of mean scores of the eight dimensions. Differences in satisfactions between men and women were not statistically significant.

TABLE 17

INTERCORRELATIONS OF DIMENSIONS WITHIN THE JOB SATISFACTION INVENTORY^a

<u>Job Satisfaction Dimension</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>	<u>(7)</u>	<u>(8)</u>
(1) Physical and mental exertion		36	38	30	39	28	41	33
(2) Relations with associates	14		66	27	60	49	58	55
(3) Relations with employer	30	77		48	53	49	64	48
(4) Security, advancement and finances	42	18	41		35	37	46	45
(5) Interest in the job	29	25	60	47		54	59	76
(6) Job information, training and status	32	73	81	49	45		49	59
(7) Physical surroundings and work conditions	47	65	66	47	40	52		50
(8) Future, goals and progress	37	46	78	59	79	62	62	

TABLE 18

CLUSTER ANALYSIS OF EIGHT DIMENSIONS IN JOB SATISFACTION INVENTORY

	<u>N=128</u> <u>Male Counselors</u>	<u>N=15</u> <u>Female Counselors</u>
<u>Cluster Formed</u>	(5), (8) ^b	(5), (8)
Average correlation <u>within</u> clusters	76	79
Average correlation <u>between</u> clusters and others	48	49
B-weight	1.58	1.61
<u>Cluster Formed</u>	(2), (3), (7)	(2), (3), (6)
Average correlation <u>within</u> clusters	63	77
Average correlation <u>between</u> clusters and others	43	45
B-weight	1.46	1.71

The relationships of job satisfaction dimension scores for male and female counselors with eight immediate and intermediate criteria of performance are presented in Tables 19 and 20.

^aCorrelations for men (N=128) are above the diagonal; they are significant at the .05 level at .18 and at the .01 level at .23. Correlations for women (N=15) are below the diagonal; they are significant at the .05 level at .50 and at the .01 level at .62. Decimals have been omitted from correlations.

^bRefers to dimension number and label used in Table 17. Decimals have been omitted from correlations.

TABLE 19

**CORRELATIONS OF JOB SATISFACTION DIMENSIONS
WITH EIGHT PERFORMANCE CRITERIA (Males, N=128)***

<u>Satisfaction With</u>	<u>Co- Worker</u>	<u>Case Velocity</u>	<u>Present Rating</u>	<u>Case- load</u>	<u>Super- visor Rating</u>	<u>Number of 12 Closures</u>	<u>Number of 13 Closures</u>	<u>Number of 15 Closures</u>
(1) Physical and mental exertion	11	-24 ^a	17 ^a	-15	13	-04	-11	25 ^a
(2) Relations with associates	-12	03	-03	02	-06	-11	-03	-09
(3) Relations with employer	-01	06	-02	03	01	-07	01	-06
(4) Security, advancement and finances	-05	06	-08	-05	04	02	05	-13
(5) Interest in the job	-04	05	00	05	06	-06	-05	-03
(6) Job information, training and status	-04	02	-06	01	04	-03	-04	08
(7) Physical surroundings and work conditions	-09	15	14	08	04	-01	05	-04
(8) Future, goals and progress	-07	-02	03	06	-08	-01	-34 ^a	-03
TOTAL job satisfaction	06	04	07	07	03	00	05	05

*Decimals have been omitted from correlations.

^aSignificant at .05 level.

TABLE 20

**CORRELATIONS OF JOB SATISFACTION DIMENSIONS*
WITH EIGHT PERFORMANCE CRITERIA (Women, N=15)***

<u>Satisfaction With</u>	<u>Co- Worker</u>	<u>Case Velocity</u>	<u>Present Rating</u>	<u>Case- load</u>	<u>Super- visor Rating</u>	<u>Number of 12 Closures</u>	<u>Number of 13 Closures</u>	<u>Number of 15 Closures</u>
(1) Physical and mental exertion	11	23	54 ^a	12	75 ^a	05	-54 ^a	-06
(2) Relations with associates	03	-17	30	18	14	-07	08	24
(3) Relations with employer	-43	-45	14	36	03	03	01	36
(4) Security, advancement and finances	-14	-27	36	66 ^a	44	55 ^a	-24	48
(5) Interest in the job	-07	-38	15	34	13	18	17	23
(6) Job information, training and status	-14	-34	41	54 ^a	20	36	00	37
(7) Physical surroundings and work conditions	-04	08	55 ^a	36	40	09	04	35
(8) Future, goals and progress	-22	-39	34	64 ^a	31	41	07	50
TOTAL job satisfaction	-15	-39	35	51 ^a	36	24	-01	46

*Decimals have been omitted from correlations.

^aSignificant at .05 level.

For male counselors, satisfaction with the physical and mental exertion of the job correlated significantly with three performance criteria (present state ratings, number of 15 closures, and caseload velocity). Those who were more dissatisfied tended to move cases from Status 1 more quickly, while the more satisfied tended to move cases more slowly. The only other significant relationship was also negative, between counselor satisfaction with future, goals and progress and number of 13 closures; that is, the more satisfied tended to get fewer 13 closures, the more dissatisfied more of these closures.

For female counselors, the criteria of size of caseload had significant correlations with three of the satisfaction dimensions, as well as total satisfaction scores. These included security, advancement and finances; job information, training and status; and future, goals and progress. Satisfaction scores on the physical and mental exertion dimension also correlated significantly with present state ratings, supervisor ratings, and number of 13 closures. Women counselors satisfied with the physical and mental demands of their job tended to get fewer 13 closures, while the more dissatisfied tended to get more. Satisfaction with security, advancement and finances also showed a significant relationship with number of 12 closures for female counselors; satisfaction with physical surroundings and work conditions in addition had a significant relationship with present state ratings.

Summary

This study examined the job satisfactions of rehabilitation counselors, using a sample of 143 counselors from six DVR agencies. A Job Satisfaction Inventory assessing satisfactions with eight dimensions of the job was used to collect information on the nature of counselor job satisfaction and to understand the relationships of such satisfactions with other criteria of performance. The job satisfaction of male and female counselors was found to be similar, although the association of satisfaction with other criteria of performance was dependent to some extent on the sex of the counselor.

APPENDIX D

JOB SATISFACTION INVENTORY

This inventory is another part of our study into the criteria problem in evaluating the work of the rehabilitation counselor. We are sure that most would agree that satisfaction with a job is a vital component in the performance of that job. This variable we want to include in our study.

The following specific statements concern your feelings, beliefs, and attitudes. There are 70 items in this inventory. For each statement, a five-point scale is provided indicating whether you rarely, sometimes, frequently, generally, or almost always do, feel, or see others as doing as the statement suggests. Thus, for example, you would check the space "R" on the scale if you rarely engage in the activity described:

I worry a lot about my job.

R S F G A
X : _____ : _____ : _____ : _____ : _____

Or, see others as engaging rarely in an activity:

The policies and problems of the people under whom I work are adequately explained to me.

X : _____ : _____ : _____ : _____ : _____

To aid you in answering this inventory, the terms rarely, sometimes, frequently, generally, and almost always have been defined on a percentage basis, as follows:

- "R" - Rarely: means from 0 to 15 per cent of the time.
- "S" - Sometimes: means from 16 to 35 per cent of the time.
- "F" - Frequently: means from 36 to 65 per cent of the time.
- "G" - Generally: means from 66 to 85 per cent of the time.
- "A" - Almost Always: means from 86 to 100 per cent of the time.

These per cent listings have been given at the top of each page in the inventory. There are no "right" or "wrong" answers to these statements. Work as rapidly as you can without being careless, and do not spend too much time on any one statement.

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

1. If I had a choice, I would choose a job in my present line of work over one in any other line of work.

R S F G A
____:____:____:____:____

2. I feel that I have an adequate understanding of what is expected of me in my job.

____:____:____:____:____

3. It is necessary for me to do things I dislike in order to get promotions.

____:____:____:____:____

4. I feel that to me others could make my work easier if they cared to do so.

____:____:____:____:____

5. I worry a lot about my daily work.

____:____:____:____:____

6. I feel if I could start over again, at 18, I would choose a different line of work.

____:____:____:____:____

7. I feel that people in general respect my job.

____:____:____:____:____

8. There are too many people telling me what to do.

____:____:____:____:____

9. I feel that I can always trust the people under whom I work.

____:____:____:____:____

10. My life would seem empty without my work to occupy me.

____:____:____:____:____

11. My present job requires me to work too long hours.

____:____:____:____:____

12. I am glad to get back to my job after a vacation.

____:____:____:____:____

13. I feel that I am as efficient as the average person with whom I work.

____:____:____:____:____

14. My work is too confining to suit me.

____:____:____:____:____

15. I feel I am paid a fair salary for the work I do.

____:____:____:____:____

16. I feel that my work utilizes my full capacities.

____:____:____:____:____

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

- | | <u>R</u> | <u>S</u> | <u>F</u> | <u>G</u> | <u>A</u> |
|---|----------|----------|----------|----------|----------|
| 17. I feel that I am "in a rut" vocationally. | _____ | _____ | _____ | _____ | _____ |
| 18. I feel that I know where I stand with my present employer. | _____ | _____ | _____ | _____ | _____ |
| 19. I feel that my work has a bad effect on my health. | _____ | _____ | _____ | _____ | _____ |
| 20. I come home upset, angry or irritable because of something that happened at work. | _____ | _____ | _____ | _____ | _____ |
| 21. I feel competent and fully able to handle my job. | _____ | _____ | _____ | _____ | _____ |
| 22. I feel my work suffers because I have too much to do. | _____ | _____ | _____ | _____ | _____ |
| 23. I would decline an opportunity to change my present job for one of equal pay, security and status. | _____ | _____ | _____ | _____ | _____ |
| 24. I think it is possible to attain my vocational goals in that portion of life that is still ahead of me. | _____ | _____ | _____ | _____ | _____ |
| 25. I feel that my family and friends respect my vocation. | _____ | _____ | _____ | _____ | _____ |
| 26. I feel there is adequate transportation available to me in going to and from work, as well as in my work when called for. | _____ | _____ | _____ | _____ | _____ |
| 27. I think I really wanted to enter my present job when I started it. | _____ | _____ | _____ | _____ | _____ |
| 28. I regard my present position as a lifetime career. | _____ | _____ | _____ | _____ | _____ |
| 29. I think my present job is in the area of work (not necessarily the same job) I wish to remain in permanently. | _____ | _____ | _____ | _____ | _____ |

"R" - Rarely (0% to 15%)

"G" - Generally (66% to 85%)

"S" - Sometimes (16% to 35%)

"A" - Almost Always (86% to 100%)

"F" - Frequently (36% to 65%)

Answer every question.

- | | <u>R</u> | <u>S</u> | <u>F</u> | <u>G</u> | <u>A</u> |
|--|----------|----------|----------|----------|----------|
| 30. I expect my job to give me more satisfaction the longer I have it. | _____ | _____ | _____ | _____ | _____ |
| 31. I feel I have had definite adequate preparation for the job I now hold. | _____ | _____ | _____ | _____ | _____ |
| 32. I feel I have made real and lasting friends among my working associates. | _____ | _____ | _____ | _____ | _____ |
| 33. My position forces me to work with certain individuals whom I dislike. | _____ | _____ | _____ | _____ | _____ |
| 34. I get discouraged in my present job. | _____ | _____ | _____ | _____ | _____ |
| 35. I feel that my job detracts from my status in the community where I live. | _____ | _____ | _____ | _____ | _____ |
| 36. I consider my work surroundings to be as pleasant as they should be. | _____ | _____ | _____ | _____ | _____ |
| 37. I feel I have eventual retirement security in my job. | _____ | _____ | _____ | _____ | _____ |
| 38. I get restless during working hours, and feel that the day is dragging endlessly. | _____ | _____ | _____ | _____ | _____ |
| 39. I feel that there should be more people to help with the work I am doing. | _____ | _____ | _____ | _____ | _____ |
| 40. I like my present job better than any other I have ever had. | _____ | _____ | _____ | _____ | _____ |
| 41. My job gives me more real personal satisfaction than the things I do in my spare time. | _____ | _____ | _____ | _____ | _____ |
| 42. I feel my occupation forces me to live in home surroundings which are uncomfortable or inadequate according to my standards. | _____ | _____ | _____ | _____ | _____ |

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

43. I wonder whether the people under whom I work approve of my work.

R S F G A
____:____:____:____:____

44. I think my job gets more difficult for me each year.

____:____:____:____:____

45. My present job gets me badly flustered and jittery.

____:____:____:____:____

46. The policies and problems of the people under whom I work are adequately explained to me.

____:____:____:____:____

47. I feel that my general interests and attitudes are about the same as those of my fellow workers who have similar jobs.

____:____:____:____:____

48. The method of payment of my earnings causes me inconvenience.

____:____:____:____:____

49. I feel at ease in the presence of the people under whom I work.

____:____:____:____:____

50. I am so interested in my work that I talk about it a great deal even after working hours.

____:____:____:____:____

51. I feel I am kept from living as I would like because of insufficient income.

____:____:____:____:____

52. I am satisfied with the degree to which my present job gives me an opportunity to express my own ideas.

____:____:____:____:____

53. I find my work so interesting that it is on my mind a lot when I am not at work.

____:____:____:____:____

54. I feel I have made a success of my job thus far in my career.

____:____:____:____:____

55. My present job forces me to maintain too fast a pace.

____:____:____:____:____

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

- | | <u>R</u> | <u>S</u> | <u>F</u> | <u>G</u> | <u>A</u> |
|--|----------|----------|----------|----------|----------|
| 56. I feel that my working associates regard me as an equal. | _____ | _____ | _____ | _____ | _____ |
| 57. I feel that I must look outside my work for those things that make life worthwhile and interesting. | _____ | _____ | _____ | _____ | _____ |
| 58. My income is sufficient to meet my financial obligations and support my family. | _____ | _____ | _____ | _____ | _____ |
| 59. I feel that my associates stimulate me to do better work. | _____ | _____ | _____ | _____ | _____ |
| 60. I think my job has "smothered" my personality. | _____ | _____ | _____ | _____ | _____ |
| 61. My vocational future looks promising to me. | _____ | _____ | _____ | _____ | _____ |
| 62. I feel that I am really interested in my present job. | _____ | _____ | _____ | _____ | _____ |
| 63. I get along well with the persons with whom I work on my present job. | _____ | _____ | _____ | _____ | _____ |
| 64. The people under whom I work make available the materials, information and assistance required to do my best work. | _____ | _____ | _____ | _____ | _____ |
| 65. I feel that the people under whom I work make unfair demands on my free time. | _____ | _____ | _____ | _____ | _____ |
| 66. I am afraid of losing my job. | _____ | _____ | _____ | _____ | _____ |
| 67. I feel that I will become more proficient at my work the longer I have it. | _____ | _____ | _____ | _____ | _____ |
| 68. Those with whom I work seem unreasonable in their dealings with me. | _____ | _____ | _____ | _____ | _____ |
| 69. I feel my present job helps me toward the financial goals I have set for myself. | _____ | _____ | _____ | _____ | _____ |

"R" - Rarely (0% to 15%)

"G" - Generally (66% to 85%)

"S" - Sometimes (16% to 35%)

"A" - Almost Always (86% to 100%)

"F" - Frequently (36% to 65%)

Answer every question.

70. The people under whom I work are desirous of
and willing to make improvements in my working
conditions.

R S F G A

____:____:____:____:____

You may use the rest of this sheet for any comments you would like to make
concerning this inventory. Thank you for your help.

REFERENCES

- Apostal, R. Two methods of evaluating vocational counseling. Journal of Counseling Psychology, 1960, 7, 171-175.
- Bellows, R. Procedures for validating vocational criteria. Journal of Applied Psychology, 1941, 25, 499-513.
- Bellows, R. Psychology of personnel in business and industry. New York: Prentice-Hall, 1949.
- Bendig, A. Rater experience and case history judgments of adjustments. Journal of Clinical Psychology, 1955, 11, 127-133.
- Bendig, A., & Sprague, J. Rater experience and the reliability of case history ratings of adjustment. Journal of Consulting Psychology, 1954, 18, 207-211.
- Blalock, H. Social statistics. New York: McGraw-Hill, 1960.
- Brams, J. Counselor characteristics and effective communication in counseling. Journal of Counseling Psychology, 1961, 8, 25-30.
- Brayfield, A. H., & Crockett, W. H. Employee attitudes and employee performance. Psychological Bulletin, 1955, 52, 396-424.
- Brogden, H., & Taylor, E. The theory and classification of criterion bias. Educational and Psychological Measurement, 1950, 10, 159-186.
- Carlson, R. E., Dawis, R. V., England, G. W., & Lofquist, L. H. The measurement of employment satisfaction. Minnesota Studies in Vocational Rehabilitation, XIII. Minneapolis: Industrial Relations Center, 1962.
- Carlson, R. E., Dawis, R. V., England, G. W., & Lofquist, L. H. The measurement of employment satisfactoriness. Minnesota Studies in Vocational Rehabilitation, XIV. Minneapolis: Industrial Relations Center, 1963.

- Cohen, L. Vocational planning and mental illness. Personnel and Guidance Journal, 1955, 34, 28-32.
- Coker, D. L. A study of the effects of training residence hall advisers in interview procedures. Unpublished M.A. thesis, University of Iowa, 1961.
- Cronbach, L. J., & Gleser, G. C. Assessing similarity between profiles. Psychological Bulletin, 1953, 50, 456-473.
- Deterline, W., & Bendig, A. The interdependence of ratings of case histories. Journal of Clinical Psychology, 1956, 12, 79-82.
- DiMichael, S. G. Work satisfaction and work efficiency of vocational counselors as related to measured interests. Journal of Applied Psychology, 1949, 33, 319-339.
- Dollard, J., & Mowrer, O. A method of measuring tension in written documents. Journal of Abnormal and Social Psychology, 1947, 42, 3-32.
- Ebel, R. Estimation of the reliability of ratings. Psychometrika, 1951, 16, 407-424.
- Eddy, R. T. Interest patterns of rehabilitation counselors. Journal of Counseling Psychology, 1960, 7, 202-211.
- England, G. Development and use of weighted blanks. Dubuque, Iowa: Wm. C. Brown, 1961.
- Flanagan, J. Critical requirements: a new approach to employee evaluation. Personnel Psychology, 1949, 2, 419-425.
- Garner, W. Uncertainty and structure as psychological concepts. New York: Wiley, 1962.
- Gaylord, R. H., & Stunkel, E.R. Validity and the criterion. Educational and Psychological Measurement, 1954, 14, 294-300.
- Ghiselli, E. Differentiation of tests in terms of the accuracy with which they predict for a given individual. Educational and Psychological Measurement, 1960, 20, 675-684.
- Ghiselli, E., & Brown, C. Personnel and industrial psychology. New York: McGraw-Hill, 1955.
- Githens, W. Research findings and methodology in the United States Navy. Paper read at American Psychological Association convention, September, 1965.
- Grant, C. W. The counselor's role. Personnel and Guidance Journal, 1954, 33, 74-77.
- Guilford, J. Psychometric methods. New York: McGraw-Hill, 1954.
- Guilford, J. Fundamental statistics in psychology and education. New York: McGraw-Hill, 1961.

- Gulliksen, H. Theory of mental tests. New York: John Wiley, 1950.
- Habbe, S. Appraisal of job performance. National Industrial Conference Board Reports, No. 121. New York: Author, 1951.
- Hahn, M. E. The training of rehabilitation counselors. Journal of Counseling Psychology, 1954, 1, 246-248.
- Hansen, R. W. An investigation into the relationship of some personality characteristics with the tendency of rehabilitation counselor trainees to enter employment in a rehabilitation setting. Unpublished M.A. Equivalency, University of Iowa, 1961.
- Hall, J. H., & Warren, S. L. (Eds.) Rehabilitation counselor preparation. Washington, D.C.: National Rehabilitation Association and National Vocational Guidance Association, 1956.
- Heron, A. Satisfaction and satisfactoriness: complementary aspects of occupational adjustment. Occupational Psychology, 1954, 28, 140-153.
- Herzberg, F., Mausner, B., Peterson, R. O., & Capwell, Dora F. Job attitudes: review of research and opinion. Pittsburgh: Psychological Service of Pittsburgh, 1957.
- Hobbs, N. The development of a code of ethical standards for psychology. American Psychologist, 1958, 3, 80-84.
- Hulin, C. L., & Smith, Patricia C. Sex differences in job satisfaction. Journal of Applied Psychology, 1964, 48, 88-92.
- Jacobs, J. The application of sociometry to industry. Sociometry, 1945, 8, 181-198.
- Jaques, Marceline E. Critical counseling behavior in rehabilitation settings. Iowa City, Iowa: University of Iowa, 1959.
- Jenkins, J. Validity for what? Journal of Consulting Psychology, 1946, 10, 93-98.
- Jensen, B., Coles, G., & Nestor, B. The criterion problem in guidance research. Journal of Counseling Psychology, 1955, 2, 58-61.
- Jensen, B., Terebinski, S. J., & Ellis, W. R. The importance of criterion definition. Journal of American Society of Training Directors, 1960, 2, 3-7.
- Johnson, B. Role conflict in rehabilitation counseling. Unpublished doctoral dissertation, University of Missouri, 1961.
- Johnson, G. An instrument for the measurement of job satisfaction. Personnel Psychology, 1955, 8, 27-37.
- Johnson, R. H., & Patterson, C. H. Vocational objectives for the emotionally disabled. Journal of Counseling Psychology, 1957, 4, 291-296.

- Johnston, L. T. The counselor as he really is. Journal of Rehabilitation, 1957, 33, 9-10.
- Kahn, R. L. Productivity and job satisfaction. Personnel Psychology, 1960, 13, 275-287.
- Katzell, R. A. Personal values, job satisfaction, and job behavior. In H. Borow (Ed.), Man in a world at work. Boston: Houghton Mifflin, 1964. Pp. 341-363.
- Katzell, R. A., Barrett, R. S., & Treadway, C. Job satisfaction, job performance, and situational characteristics. Journal of Applied Psychology, 1961, 45, 65-72.
- Kelley, H.H., & Thibaut, J.W. Experimental studies of group problem solving and process. In G. Lindzey (Ed.), Handbook of social psychology. Vol. 2. Special fields and applications. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 735-785.
- Kirchner, W., & Dunnette, M. Applying the weighted application blank technique to a variety of office jobs. Journal of Applied Psychology, 1957, 41, 206-208.
- Lindquist, E. F. Design and analysis of experiments. Cambridge, Mass.: Riverside Press, 1953.
- Lindzey, G., & Borgatta, E. Sociometric measurement. In G. Lindzey (Ed.), Handbook of Social psychology. Vol. 1. Theory and Method. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 405-448.
- McAlees, D. C., & Warren, S. L. Increasing the supply of qualified rehabilitation counseling personnel in state vocational rehabilitation agencies. Unpublished manuscript, Vocational Rehabilitation Administration, Department of Health, Education, and Welfare, 1965.
- McGowan, J. F. The counselor as others see him. Journal of Rehabilitation, 1957, 23 (May-June), 7-9.
- Miller, L. A. A study of a case-review criterion for evaluating rehabilitation counselor performance. Unpublished doctoral dissertation, University of Iowa, 1963.
- Moed, G. Procedures and practices in pre-vocational evaluation: a review of current programs. In J. Muthard (Ed.), Proceedings of the Iowa conference on pre-vocational activities. Iowa City, Iowa: University of Iowa, 1960.
- Moriarty, E. The supervisor in a state rehabilitation agency. Journal of Rehabilitation, 1959, 25, 2, 24-25.
- Mosel, J., & Wade, R. A weighted application blank for reduction of turnover in department store sales-clerks. Personnel Psychology, 1951, 4, 177-184.

- Muthard, J. E., & Miller, L. A. Evaluation of rehabilitation counselor performance: a survey of state agency practices. Personnel and Guidance Journal, 1963, 42, 274-279.
- Muthard, J. E., & Miller, L. A. Criteria for rehabilitation counselor performance in state vocational rehabilitation agencies. Journal of Counseling Psychology, 1964, 11, 123-128.
- Nagle, B. Criterion development. Personnel Psychology, 1953, 6, 271-289.
- National Industrial Conference Board. Studies in personnel policy. Personnel Practices in Factory and Office. No. 145. New York: Author, 1954.
- Newton, R. The clinician as judge: total Rorschach and clinical case material. Journal of Consulting Psychology, 1954, 18, 248-250.
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana, Ill.: University of Illinois Press, 1957.
- Patterson, C. H. Counselor or coordinator? Journal of Rehabilitation, 1957, 23 (May-June), 13-15.
- Patterson, C. H. Counseling the emotionally disturbed. New York: Harper, 1958.
- Patterson, C. H. Test characteristics of rehabilitation counselor trainees. Journal of Rehabilitation, 1962, 28, 5, 15-16.
- Remmers, H. Rating methods in research on teaching. In N. Gage (Ed.), Handbook of research on teaching. Chicago: Rand McNally, 1963. Pp. 329-378.
- Robinson, H. Job satisfaction researches of 1955. Personnel and Guidance Journal, 1956, 34, 565-568.
- Robinson, H. Job satisfaction researches of 1956. Personnel and Guidance Journal, 1957, 36, 34-37.
- Robinson, H. Job satisfaction researches of 1958. Personnel and Guidance Journal, 1959, 37, 669-673.
- Robinson, H., & Conners, R. P. Job satisfaction researches of 1961. Personnel and Guidance Journal, 1962, 41, 240-246.
- Robinson, H., & Conners, R. P. Job satisfaction researches of 1962. Personnel and Guidance Journal, 1963, 42, 136-142.
- Ross, I., & Zander, A. Need satisfaction and employee turnover. Personnel Psychology, 1957, 10, 327-338.
- Rusalew, H. An analysis of the functions of state vocational rehabilitation counselors with implications for the development of a training course at teachers college. Unpublished doctoral dissertation, Teachers College, Columbia University, 1951.

- Schubert, M. Field work performance: achievement levels of first-year students in selected aspects of casework service. Social Service Review, 1958, 32, 120-137.
- Scott, T. B., Dawis, R. V., England, G. W., & Lofquist, L. H. A definition of work adjustment. Minnesota Studies in Vocational Rehabilitation, X. Minneapolis: Industrial Relations Center, 1960.
- Scurlock, V. Supervision in state rehabilitation agencies. Journal of Rehabilitation, 1958, 24, 4, 7-9.
- Severin, D. The predictability of various kinds of criteria. Personnel Psychology, 1952, 5, 93-104.
- Sluckin, W. Combining criteria of occupational success: Part I. Occupational Psychology, 1956, 30, 20-26.
- Sluckin, W. Combining criteria of occupational success: Part II. Occupational Psychology, 1956, 30, 57-68.
- Smith, C. E. A survey of opinion upon the occupational role of the rehabilitation counselor. Unpublished doctoral dissertation, University of Missouri, 1960.
- Smits, S. J. Rehabilitation counselor recruitment study: final report. Washington, D.C.: National Rehabilitation Association, 1964.
- Spencer, G. J., & Worthington, R. Validity of a projective technique in predicting sales effectiveness. Personnel Psychology, 1952, 5, 125-144.
- Super, D. The criteria of vocational success. Occupations, 1951, 30, 5-9.
- Swineford, F. The measurement of a personality trait. Journal of Educational Psychology, 1938, 29, 295-300.
- Tate, M. Statistics in education. New York: Macmillan, 1955.
- Taylor, E., & Hastman, R. Relation of format and administration to the characteristics of graphic rating scales. Personnel Psychology, 1956, 9, 181-206.
- Thorndike, R. (Ed.). Research problems and techniques, Report No. 3, Army Air Forces Aviation Psychology Program. Washington, D.C.: Government Printing Office, 1947.
- Thorndike, R. Personnel selection. New York: John Wiley, 1949.
- Thorndike, R. Reliability. In E. Lindquist (Ed.), Educational measurement. Menasha, Wis.: George Banta, 1951. Pp. 560-620.
- Truax, W. E. Critical requirements of small school counselors. Personnel and Guidance Journal, 1956, 35, 103-106.

- Tryon, R. C. Cluster analysis. Ann Arbor, Mich.: Edward Bros., 1939.
- Vallance, T., Glickman, A. S., & Suci, G. J. Criterion rationale for a personnel research program. Journal of Applied Psychology, 1953, 37, 429-431.
- Wagner, R. F. A study of the critical requirements for dentists. Unpublished doctoral dissertation, University of Pittsburgh, 1949.
- Warren, S. L. The rehabilitation counselor today. Journal of Rehabilitation, 1959, 25, 5, 7-9.
- Wherry, R. Criteria and validity. In D. H. Fryer & E. Henry (Eds.), Handbook of applied psychology. New York: Rinehart, 1950. Pp. 170-176.
- Wherry, R. The past and future of criterion evaluation. Personnel Psychology, 1957, 10, 1-5.
- Wherry, R., & Fryer, D. H. Buddy ratings: popularity contest or leadership criteria? Sociometry, 1949, 12, 179-190.
- Wolfe, E. W. Staff evaluations: a key to effective performance. Journal of Rehabilitation, 1960, 26, 4, 19-22.
- Ziller, R. Vocational choice and utility for risk. Journal of Counseling Psychology, 1957, 4, 61-64.